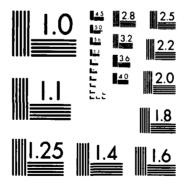


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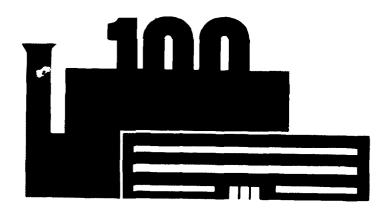


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100 COMPANIES RECEIVING THE LARGEST DOLLAR VOLUME OF PRIME CONTRACT AWARDS Fiscal Year 1980



100 LARGEST DEFENSE CONTRACTORS AND THEIR SUBSIDIARY CORPORATIONS FISCAL YEAR 1980

Issued Annually by the
DEPARTMENT OF DEFENSE
WASHINGTON HEADQUARTERS SERVICES
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FOREWORD

This report represents summary data on Department of Defense prime contracts awarded to the leading 100 companies and their subsidiary corporations during fiscal year 1980.

The data include debit and credit procurement actions over \$10,000, worldwide, under supply, service, and construction contracts. Procurement actions include definitive contracts, the obligated portions of letter contracts, job orders, task orders, delivery orders, and any other orders against existing contracts. The data neither include that part of indefinite quantity contracts that have not been translated into specific orders on business firms, nor that have not yet become mutually binding agreements between the government and the company. The company totals do not include contracts made by other U.S. Government agencies and financed with Department of Defense funds, or contracts awarded in foreign nations through their respective governments.

The assignment of subsidiaries to parent companies is based on stock ownership of 50 percent or more by the parent company, as indicated by data published in standard industrial reference sources.

The company names and corporate structures are those in effect as of September 30, 1980, and for purposes of this report company names have been retained unless specific knowledge was available that a company has been merged into the parent or absorbed as a division with loss of company identity. Only those subsidiaries are shown for which procurement actions have been reported.

100 COMPANIES AND THEIR SUBSIDIARY CORPORATIONS LISTED ACCORDING TO NET VALUE OF PRIME CONTRACT AWARDS

FISCAL YEAR 1980

Department of Defense prime contract awards over \$10,000 for research and development, services, construction, and supplies and equipment awarded during fiscal year 1980 totaled \$76.8 billion, \$13.5 billion more than in fiscal year 1979. Large awards for aircraft, missile and space systems, electronics and communications, and ships, which are dominated by large contractors, resulted in \$50.6 billion or 65.9 percent of total procurement being awarded to these 100 companies which, together with their subsidiaries, received the largest dollar volume of prime contracts over \$10,000. In fiscal year 1979, the top 100 companies received \$42.0 billion or 66.4 percent of the volume of all awards.

The following table shows that the first five companies received 18.8 percent of the total received by all companies in fiscal year 1980, compared with 20.7 percent during fiscal year 1979. The largest company in fiscal year 1980 received awards totaling \$3.5 billion as did the largest company in fiscal year 1979. To get on the list in fiscal year 1980 required \$86 million in awards, as opposed to \$76 million in fiscal year 1979.

		PERCENT OF TOTAL				
COMPANY						
POSITIONS		FY 1977	FY 1978	FY 1979	FY 1980	
•		5 1#	7 08	c c#		
lst		5.1%	7.0%	5.5%	4.6%	
2nd		3.3	4.8	5.1	4.2	
3rd		3.2	4.0	4.0	4.0	
4th		3.1	3.7	3.2	3.1	
5th		2.9	3.0	3.0	2.9	
TOTAL -	1-5	17.7%	22.5%	20.7%	18.8%	
6-10		12.7%	11.9%	10.8%	11.0%	
11-25		16.9	14.3	14.6	15.4	
TOTAL -	1-25	47.3%	48.7%	46.1%	45.2%	
26-50		11.6%	11.1%	11.0%	11.6%	
51-75		5.3	5.4	5.8	5.8	
76-100		3.5	3.3	3.5	3.3	
TOTAL -	1-100	67.7%	68.5%	66.4%	65.9%	

Eighteen contractors who did not appear on the list last year are among the top 100 companies this year. Of these, one appears in position 43, one in position 46, and the balance between positions 50 and 100.

COMPANIES LISTED IN FY 1980 BUT NOT IN FY 1979

COMPANIES LISTED IN FY 1979 BUT NOT IN FY 19801/

Ashland Oil, Inc. Atlantic Richfield Co. Centex Corp. City Investing Co. First Colony Farms, Inc. General Agencies & Sam Whan JV Getty Oil Co. Graves, Kiewit, Granite JV Hanil Development Co. Ltd. & Al Mabani JV Imperial Chemical Industries, Inc. | Kaiser Industries Corp. Kasler Continental Heller Etal JV Loral Corp. Mi Ryung Construction Co., Ltd. Montedison SPA Pride Refining Co. Sam Whan Corp. Saudi Maintenance Co. Ltd Sun Chemical Corp.

Al Huseini Bautechnik Akuengesellschaft Bethlehem Steel Corp. Ching Heung International, Inc. Coastal Dry Dock Repair Dupont E I De Nemours & Co. Dynalectron Corp. Eaton Corp. H B H JV Hyun Dai Construction Co., Ltd. Morrison-Knudsen Co., Inc. Norris Industries Rolls Royce Ltd. Swann L A 011 Co. Tracor, Inc. Vinnell Corp.

Of the 82 companies appearing on the list in both fiscal years 1979 and 1980, 33 advanced their position, 40 are in a lower position, and 11 showed no change. Companies are considered as appearing on the list in both years despite mergers, acquisitions, divestitures, and name changes if a major component of a newly constituted company or the newly constituted company itself made the list as a component of a company in the top 100 in the prior year.

Although the contract work of many companies on the list include more than one procurement category, each company has been assigned in the following table to the procurement category that accounts for its largest dollar volume of defense awards; for example, International Telephone and Telegraph Corporation is a multi-industry company producing electronic and communications equipment and industrial and consumer products. this table, it is assigned to "Electronics," the procurement category accounting for its largest dollar volume of DoD contract awards. On this basis, companies supplying "petroleum" increased by four while "ships" decreased by four.

^{1/}Excludes Beech Aircraft Corp. which is now a subsidiary of Raytheon Co.

NUMBER OF COMPANIES

Procurement Category	FY 1979	FY 1980	Change
Aircraft	18	16	-2
Missiles	11	13	2
Ships	8	4	-4
Tank Automotive	5	5	0
Ammunition	9	7	-2
Electronics	16	18	2
Services	12	10	-2
Construction	4	5	1
Petroleum	15	19	4
Weapons	1	2	1
Subsistence	0	0	0
All Other	1	1	Ō

During fiscal year 1980, twelve companies received prime contract awards totalling \$1 billion or more. The twelve companies and a brief description of their major work are as follows:

RANK COMPANY NAME		AWARDS		
1980	1979		1980 (bill	1979 ions)
1	1	General Dynamics Corp.	\$3.5	\$3.5
2	2	McDonnell Douglas Corp.	3.2	3.2
3	3	United Technologies Corp.	3.1	2.6
4	7	Boeing Co.	2.4	1.5
5	4	General Electric Co.	2.2	2.0
6	5	Lockheed Corp.	2.0	1.8
7	6	Hughes Aircraft Co.	1.8	1.6
8	9	Raytheon Co.	1.7	1.2
9	10	Tenneco, Inc.	1.5	1.1
10	8	Grumman Corp.	1.3	1.4
11	13	Northrop Corp.	1.2	•8
12	50	Motor Oil Hellas	1.1	•2

COMPANY

MAJOR WORK

1. General Dynamics Corp.

F-16 and F-111 aircraft. STINGER and RIM-66 missiles. MK-15 Close-in weapon system. Nuclear submarines.

COMPANY

MAJOR WORK

- 2. McDonnell Douglas Corp. F-15 EAGLE, F-4 PHANTOM, F-18 fighter aircraft and C-10 cargo aircraft. HARPOON, TOMAHAWK, and DRAGON missiles.
- 3. United Technologies Corp. F-100, TF-30, TF-33, and J-56 turbofan and turbojet engines.
 UH-60 UTTAS, and CH-53 SEA STALLION
 helicopters.
- Airborne Warning and Control System
 (AWACS).
 TOMAHAWK, SHORAD, MINUTEMAN, and
 ROLAND missile systems.
 Radio and TV equipment for the Advanced Airborne Command Post.
 Airframe structural components.
- 5. General Electric Co.

 Nuclear submarines.

 F-18 fighter aircraft engines.

 UH-60 UTTAS helicopter engines.

 MINUTEMAN missile.

 Miscellaneous electronics and communications equipment.
- 6. Lockheed Corp.

 TRIDENT, POLARIS, and Standard Arm missiles.
 P-3 ORION, C-141 STARLIFTER, C-5 GALAXY, and C-130 HERCULES air-craft.
 Space vehicles.
 Amphibious assault ships.
- 7. Hughes Aircraft Co.

 TOW, SHORAD, PHOENIX, ROLAND, and
 TRIDENT missile systems.

 Radar equipment and guided missile
 systems for A-6 INTRUDER, F-14
 TOMCAT, and F-15 EAGLE aircraft.

 R & D for electronics and communication equipment.
- 8. Raytheon Co.

 HAWK, PATRIOT, SPARROW, and TRIDENT missile systems.

 Electronic countermeasures.

 Underwater sound equipment.

 Miscellaneous electronics and communications equipment.

COMPANY

MAJOR WORK

R & D missile and space systems.

9. Tenneco, Inc.

Aircraft carriers and subchasers.

Maintenance and repair of ships.

Warehouse trucks and tractors.

10. Grumman Corp.

F-14 TOMCAT, E-2 HAWKEYE, E-6
PROWLER, and A-6 INTRUDER aircraft.
Electronic countermeasures for F-111
aircraft.
Modification of aircraft equipment.

11. Northrop Corp.

F-5 FREEDOM FIGHTER aircraft.
Guided missile launchers and remote
control systems for the HAWK missile.
Electronic countermeasures and
miscellaneous aircraft accessories.

12. Motor Oil Hellas Petroleum.

INDEX OF 100 PARENT COMPANIES WHICH WITH THEIR SUBSIDIARIES RECEIVED THE LARGEST DOLLAR VOLUME OF MILITARY PRIME CONTRACT AWARDS IN FISCAL YEAR 1980

RANK	PARENT COMPANY		PARENT COMPANY
66.	AEROSPACE CORP (N)		INTERNATIONAL TELEPHONE + TEL CORP
	AGIP S P A		JOHNS HOPKINS UNIVERSITY (N)
	AMERADA HESS CORP	84.	KASLER CONTINENTAL HELLER ETAL JV
73.	AMERICAN MOTORS CORP	25	I T V CORP
21.	AMERICAN TELEPHONE + TELEGRAPH CO	88.	LEAR SIEGLER INC
98.	ASHLAND GIL INC	20.	LITTON INDUSTRIES, INC
43.	ATLANTIC RICHFIELD CO		LOCKHEED CORP
42.	AVCO CORP	89.	LORAL CORP
39 .	BENDIX CORP		MARTIN MARIETTA CORP
	BOEING CO	68.	MASSACHUSETTS INSTITUTE TECHNOLOGY
94.	CENTEX CORP	2.	MCDONNELL DOUGLAS CORP
79.	CHAMBERLAIN MFG CORP	6 1.	MI RYUNG CONSTRUCTION CO LTD
	CHRYSLER CORP	80.	MITRE (THE) CORP (N)
	CITY INVESTING CO		MOBIL CORP
	COASTAL CORP		MONTEDISON SPA
	COMPUTER SCIENCES CORP		MOTOR OIL HELLAS
	CONGOLEUM CORP		MOTOROLA INC
	CONTROL DATA CORP		NORTH AMERICAN PHILIPS CORP
	E SYSTEMS, INC		NORTHROP CORP
	EASTMAN KODAK CO		PACIFIC RESOURCES INC
	EMERSON ELECTRIC CO		PAN AMERICAN WORLD AIRWAYS INC
	EXXON CORP		PRIDE REFINING CO
	F M C CORP	22.	R C A CORP
	FAIRCHILD INDUSTRIES, INC	_8.	RAYTHEON CO REYNOLDS (RJ) INDUSTRIES, INC ROCKWELL INTERNATIONAL CORP ROYAL DUTCH SHELL GROUP SAM WHAN CORP SANDERS ASSOCIATES INC SAUDI MAINTENANCE CO LTD SIGNAL COMPANIES INC (THE) SINGER CO
	FELEC SERVICES INC	58.	REYNOLDS (RJ) INDUSTRIES, INC
	FIRST COLONY FARMS INC	14.	ROCKWELL INTERNATIONAL CORP
	FORD MOTOR CO	52.	ROYAL DUTCH SHELL GROUP
52.	G K TECHNOLOGIES INC	46.	SAM WHAN CORP
72.	GENERAL AGENCIES & SAM WHAN JV 1/	87.	SANDERS ASSOCIATES INC
	GENERAL DYNAMICS CORP	75 .	SAUDI MAINTENANCE CO LTD
	GENERAL ELECTRIC CO	65 .	SIGNAL COMPANIES INC (THE)
26.	GENERAL MOTORS CORP	31.	SINGER CO
	GENERAL TELEPHONE + ELECTRNCS CORP	16.	SPERRY CORP
	GENERAL TIRE + RUBBER CO	30.	STANDARD OIL CO OF CALIF
	GETTY OIL CO	57.	STANDARD OIL OF INDIANA
	GOODYEAR TIRE + RUBBER CO	69.	SUMMA CORP
50.	GOULD, INC	6 1.	SIGNAL COMPANIES INC (THE) SINGER CO SPERRY CORP STANDARD OIL CO OF CALIF STANDARD OIL OF INDIANA SUMMA CORP SUN CHEMICAL CORP SUN CO INC SVERDRUP CORP
83.	GROVES KIEWIT GRANITE JV	51.	SUN CU INC
10.	GRUMMAN CORP	/U.	T B H INC
78.	OHE 611 COPP	e / .	T R W INC Teledyne inc
99. 86	GULF OIL CORP HANIL DEV CO LTD & AL MABANI JV 2/	33.	TENNECS INC
30. 84	HADDIC CODE		TENNECO INC
	HARRIS CORP		TEXACO INC TEXAS INSTRUMENTS INC
	HARSCO CORP		
	HERCULES, INC	23.	TEXTRON INC Thiokol corp
	HEWLETT PACKARD CO	53. 35	TODD SHIPYARDS CORP
₹ .	HONEYWELL INC	JO.	HINTED TECHNOLOGIES CORP
o'.	HUGHES AIRCRAFT CO IMPERIAL CHEMICAL INDUSTRIES LTD INTERNATIONAL BUSINESS MACHINES CO	ა. 1 #	UNITED TECHNOLOGIES CORP
. .	INFERIAL CHEMICAL INDUSTRIES LID	15.	WESTINGHOUSE ELECTRIC CORP

 ^{1/} General Agencies Corp. & Sam Whan Corp. JV
 2/ Hanil Dev. Co. Ltd., and Al Mabani General Contractor JV.
 3/ Kasler Corp., Continental Heller Corp. & Fruin-Colnon Corp. Kasler Corp., Continental Heller Corp. & Fruin-Colnon Corp. JV

100 COMPANIES AND THEIR SUBSIDIARIES LISTED ACCORDING TO NET VALUE OF MILITARY PRIME CONTRACT AWARDS

FISCAL YEAR 1980 (1 OCT 1979 - 30 SEP 1980)

RANK	COMPANIES	THOUSANDS OF DOLLARS	PERCENT OF U.S. TOTAL	CUMULATIVE PERCENT OF U.S. TOTAL
	,			
	T O'T A L	\$76,807,259	100.00	100.00
	TOTAL, 100 COMPANIES + THEIR SUBSIDIARIES	50,663,438	65,96	65.96
1.	GENERAL DYNAMICS CORP	3,501,651		
	DATAGRAPHIX GMBH	141		
	DATAGRAPHIX INC	9,363		
	STROMBERG CARLSON CORP	6,751		
	TOTAL	3,517,906	4.58	4.58
2.	MCDONNELL DOUGLAS CORP	3,246,557	4.23	ē. 81
•	LINETED TECHNOLOGICA ACCE			
3.	UNITED TECHNOLOGIES CORP CARRIER INTERNATIONAL CORP	3,025,766		
	ESSEX GROUP INC	3,376 1,323		
	MOSTEK CORP	63		
	NORDEN SYSTEMS INC	77,640		
	OTIS ELEVATOR CO	570		
	PRATT + WHITNEY AIRCRAFT OF WVA	16		
	UNITED TECHNOLOGIES RESEARCH CTR	147		
	TOTAL	3,108,901	4.05	12.86
4.	BOEING CO	1,671,029		
	BOEING AEROSPACE CO	411,206		
	BOEING COMPUTER SERVICES INC	7,169		
	BOEING INTERNATIONAL CORP	3,205		
	BOEING SERVICES INTERNATIONAL INC	92,826		
	BOEING VERTOL CO	200,024		
	TOTAL	2,385,459	3.11	15.97
5 .	GENERAL ELECTRIC CO	2,171,629		
	GENERAL ELECTRIC MEDICAL SYSTEMS	102		
	GENERAL ELECTRIC TECH SVC CO INC	61		
	MANAGEMENT + TECHNICAL SERVICES CO	30,250		
	TOTAL	2,202,042	2.87	18.84
6.	LOCKHEED CORP	809,975		
•	LOCKHEED ELECTRONICS CO, INC	55,250		
	LOCKHEED MISSILES + SPACE CO INC	1,097,451		
	LOCKHEED SHIPBUILDING CONSTRUCTION	73,522		
	MURDOCK MACHINE + ENGR CO OF TEXAS	846		
	TOTAL	2,037,044	2.65	21.49
7.	HUGHES AIRCRAFT CO	1 700 100		
, .	HUGHES RESEARCH LABS.	1,769,162 1,771		
	SANTA BARBARA RESEARCH CENTER	48,125		
	TOTAL	1,819,058	2.37	23.86

RANK	COMPANI ES	THOUSANDS OF DOLLARS	PERCENT OF U.S. TOTAL	CUMULATIVE PERCENT OF U.S. TOTAL
8.	RAYTHEON CO	1,582,286		
	AMRAD INC	33		
	BEECH AEROSPACE SERVICES	29,652		
	BEECH AIRCRAFT CORP CALORIC CORP	65,365		
	DENVER BEECHCRAFT	102 108		
	INDIANA BEECHCRAFT INC	76		
	IOWA MFG CO OF CEDAR RAPIDS IOWA	26		
	KURAS ALTERMAN CORP	6, 291		
	LEXITRON CORP	1,230		
	LORAC SERVICE CORP	219		
	MACHLETT LABORATORIES INC	1,607		
	RAYTHEON GULF SYSTEMS CO	34,813		
	RAYTHEON MARINE CO	214		
	RAYTHEON OCEAN SYSTEMS CO	11		
	RAYTHEON SERVICE CO	21,805		
	SWITCHCRAFT INC United Engineers + Constructors	129		
	UNITED ENGINEERS + CONSTRUCTORS	1,140		
	TOTAL	1,745,107	2 27	26.13
	TOTAL	1,740,107	2.27	20.10
9.	TENNECO INC			
	CASE (JI) CO	31,765		
	CASE POWER + EQUIPMENT LTD	49		
	GAS EQUIPMENT ENGRS, INC	5,723		
	MONROE AUTO EQUIPMENT CO	378		
	NEWPORT NEWS SHIPBLD + DRY DOCK CO	1,486,394		
	PACKAGING CORP OF AMERICA	50		
	TENNECO CHEMICALS, INC	55		
	TOTAL	1,524,414	1.98	28.11
10.	GRUMMAN CORP			
	GRUMMAN AEROSPACE CORP	1,285,666		
	GRUMMAN DATA SYSTEMS CORP	36,357		
•	TOTAL	1,322,023	1.72	29.83
11.	NORTHROP CORP	1,145,727		
	EXTEK MICROSYSTEMS INC	10		
	NORTHROP WORLDWIDE ACFT SVCS INC	80,769		
	PAGE COMMUNICATIONS ENGINEERS INC	833		
	TATAL	1 007 000	1.60	21 42
	TOTAL	1,227,339	1.60	31.43
12.	MOTOR OIL HELLAS	1,058,646	1 . 38	32.81
13.	CHRYSLER CORP	898,026		
	CHRYSLER DEFENSE INC	72,855		
	TOTAL	970,881	1 . 26	34.07
14.	ROCKWELL INTERNATIONAL CORP	968,548		
• • •	COLLINS INTERNATIONAL SERVICE CO	161		
	FINCOR, INC	11		
	UNICOM SYSTEMS INC	514		
	TOTAL	969, 234	1 . 26	35,33
15.	WESTINGHOUSE ELECTRIC CORP	930,878		
	WESTINGHOUSE AIRPORT SYSTEMS	12		
	WESTINGHOUSE DATASCORE SYSTEMS WESTINGHOUSE ELECTRIC SUPPLY CO	69 802		
	WESTINGHOUSE ELECTRIC SUPPLY CO	892 55		
	ALCHIMICOSE EFFATOR OF	55		

RANK	COMPANIES	THOUSANDS OF DOLLARS	PERCENT OF U.S. TOTAL	
15.	WESTINGHOUSE ELECTRIC CORP WESTINGHOUSE LEARNING CORP	147		
	TATAL			
	TOTAL	932,053	1.21	36.54
16.	SPERRY CORP	835,260		
	SPERRY ELECTRO COMPONENTS SPERRY FLIGHT SYSTEMS	342 4,175		
	SPERRY MARINE SYSTEMS	4,175		
	SPERRY MICROWAVE COMPONENTS SPERRY SUPPORT SERVICES	62		
	SIERRI SOFFORI SERVICES	158		
	TOTAL	844,977	1.10	37.64
17.	F M C CORP	834,640	1.09	38.73
18.	MARTIN MARIETTA CORP	763,150		
	INTERNATIONAL LASER SYSTEMS INC	7,630		
	MARTIN MARIETTA ALUMINUM INC MARTIN MARIETTA ALUMINUM SALES INC	3,545		
	MARTIN MARIETTA DATA SYSTEMS INC	34,229 127		
	TATAL	•		
	TOTAL	808,681	1.05	39.78
19.	HONEYWELL INC ELECTRONICS FOR MEDICINE	579,633		
	HONEYWELL INFORMATION SYSTEMS, INC	181 106,511		
	HONEYWELL MARINE SYSTEMS CENTER INCOTERM CORP	64		
	SPECTRONICS INC	75 524		
	SYNERTEK INC	30		
	TOTAL	687,018	0.89	40,67
20.	LITTON INDUSTRIES, INC	39,479		
	BELOIT POWER SYSTEMS	559		
	DIEHL DATA SYSTEMS Litton bionetics inc	336		
	LITTON BUSINESS SYSTEMS, INC	75 651		
	LITTON EDUCATIONAL PUB CO, INC	12		
	LITTON INDUSTRIAL PRODUCTS INC Litton medical products, inc	782 53		
	LITTON PRECISION PRODS INTL INC	25		
	LITTON SYSTEMS INC MONROE CALCULATING CO	610,007		
	MONROE INTERNATIONAL INC	366 38		
	TOTAL			
•		652,383	0.85	41.52
21.	AMERICAN TELEPHONE + TELEGRAPH CO BELL TELEPHONE CO OF PA	275,740 285		
	CHESAPEAKE + POTOMAC TEL CO OF DC	42,139		
	ILLINGIS BELL TEL CO Michigan Bell tel co	419 432		
	MOUNTAIN BELL TELEPHONE CO	4,810		
	NEW ENGLAND TEL + TEL CO NEW JERSEY BELL TELEPHONE CO	2,251		
	NEW YORK TELEPHONE CO	579 1,092		
	NORTHWESTERN BELL TELEPHONE CO	897		
	OHIO BELL TELEPHONE CO PACIFIC NORTHWEST BELL TELEPHONE	1,917		
	PACIFIC TELEPHONE + TELEGRAPH CO	459 3,167		
	SOUTH CENTRAL BELL TEL CO	2,216		

RANK		THOUSANDS OF DOLLARS	PERCENT	CUMULATIVE PERCENT OF U.S. TOTAL
21.	AMERICAN TELEPHONE + TELEGRAPH CO			
	SOUTHERN BELL TELEPHONE + TELEGRPH	4,194		
	SOUTHWESTERN BELL TELEPHONE	4,325		
	TELETYPE CORP Western Electric Co inc	11,817 240,335		
	WESTERN ELECTRIC CO THO			
	TOTAL	597,074	0.7 8	42.30
22.	R C A CORP	574,259		
	BANQUET FOODS CORP	587		
	HERTZ CORP	386 85		
	HERTZ EQUIPMENT RENTAL CORP	13,324		
	R C A GLOBAL COMMUNICATIONS, INC R C A LABORATORIES SARNOFF RES CTR	268		
	R C A MOBILE COMMUNICATIONS	26		
		E00 00E	0.77	43.07
	TOTAL	588,935	0.77	43.07
23.	TEXTRON INC	555,117		
	BELL HELICOPTER INTL INC	12,000		
	BELL TECHNICAL OPERATIONS CORP	11,515 106		
	JACOBSEN MFG CO			
	TOTAL	578, 738	0.75	43.82
24.	FAIRCHILD INDUSTRIES, INC	557,072		
£7.	AMERICAN SATELLITE CORP	2,205		
	TOTAL	559,277	0.73	44.55
05	L T V CÖRP	6,447		
25.	JONES + LAUGHLIN STEEL CORP	623		
	KENTRON HAWAII LTD	33,658		
	KENTRON INTERNATIONAL INC	13,010		
	LYKES BROS STEAMSHIP CO INC	94,622		
	VOUGHT CORP	351,051 453		
	WILSON FOODS CORP	11,018		
	WILSON + CO INC Youngstown sheet & Tube Co	11,010		
	FOUNGSTOWN SHEET & TODE GO			
	TOTAL	510,902	0.67	45.22
26.	GENERAL MOTORS CORP	508,803	0.66	45.88
07	T R W INC	418,269		
27.	AERTECH INDUSTRIES	572		
	E S L INC	47,464		
	T R W COLORADO ELECTRONICS, INC	41,072		
	T R W GLOBE MOTORS	638		
	T R W RAMSEY CORP	69		
	TOTAL	508,084	0.66	46.54
28.	INTERNATIONAL BUSINESS MACHINES CO	494,942		
	I B M DEUTSCHLAND GMBH	1, 9 03 108		
	SCIENCE RESEARCH ASSOCIATES INC			
	TOTAL	496,953	0.65	47.19
29.	EXXON CORP	427,404		
	ESSO A G	50,807		
	esso italiana s p a esso petrol co ltd	868 61		

				*
RANK	COMPANIES	THOUSANDS	PERCENT	CUMULATIVE
	***************************************	THOUSANDS OF DOLLARS	TOTAL	U.S. TOTAL
29.				
	ESSO S A F	14		
	EXXON RESEARCH + ENGINEERING CO	483		
	TOTAL		0.62	47.81
30.	STANDARD OIL CO OF CALIF			
•••	CALTEX ASIA ITD	903		
	CALTEX NEW ZEALAND, INC $\frac{1}{}$	51		
	CALTEX DIL PAKISTAN	7		
	CALTEX GIL PRODUCTS CO	85,646		
	CALTEX ÖVERSEAS LTD Chevron Chemical Co	8		
	CHEVRON INTERNATIONAL GIL CO, INC	35 35		
	CHEVRON OIL CO	252 1,805		
	CHEVRON U S A INC	386, 247		
	TOTAL	474,954	0.62	48.43
31.		421,672		
	FRIDEN MAILING EQUIPMENT CORP	82		
	H R B SINGER, INC	13,672		
	TOTAL	407 400		
00		435,426	0.57	49.00
32.	TEXAS INSTRUMENTS INC	431,428	0.56	49.56
33.	TELEDYNE INC	30,732		
	MICRONETICS INC	100		
	ORDNANCE SPECIALTIES INC TELEDYNE AEROSPACE SYSTEMS	1,181		
	TELEDYNE AVIONICS	35 1 <i>2</i>		
	TELEBURIE BARRES	134		
	TELEDYNE BROWN ENGINEERING	25, 123		
	TELEDYNE C A E Teledyne camera systems	32,357		
	TELEDYNE CONTROLS	2,328		
	TELEDYNE ELECTRONICS	1,691		
	TELEDYNE FARRIS ENGINEERING	32,334 2 36		
	TELEDYNE FIRTH STERLING INC	93		
	TELEDYNE GEOTECH	3,348		
	TELEDYNE GURLEY TELEDYNE HANAU ENGINEERING	399		
	TELEDYNE HASTINGS RAYDIST	93		
	TELEDYNE HYDRA POWER	794 1,454		
	TELEDYNE INDUSTRIES, INC	232,514		
	TELEDYNE INET BELGIUM SA	11		
	TELEDYNE INET INC TELEDYNE LANDIS MACHINE CO	259		
	TELEDYNE LEWISBURG	842		
	TELEDYNE LINAIR ENGINEERING	5,987 22		
	TELEDYNE M E C	10,108		
	TELEDYNE MCCORMICK SELPH	4,825		
	TELEDYNE MICROSI FOTDONIA	199		
	TELEDYNE MICROELECTRONICS TELEDYNE MICROWAVE	368		
	TELEDYNE MONARCH RUBBER	17 1 524		
	TELEDYNE NATIONAL	1,524 24 <i>2</i>		
	TELEDYNE PEER	115		
	TELEDYNE PHILBRICK	12		
	TELEDYNE PINES Teledyne precision castings	14		
	TELEDYNE RELAYS	. 22		
		177		

 $[\]underline{1}/$ Stock ownership in the Caltex Companies is equally divided between Standard Oil of California and Texaco, inc.

DANIV	AMMOANITO	THOUSANDS	PERCENT	CUMULATIVE
RANK		DOLLARS	TOTAL	CUMULATIVE PERCENT OF U.S. TOTAL
		• • • • • • • • • • • • • • • • • • • •		
33.	TELEDYNE INC			
	TELEDYNE REPUBLIC MFG	639		
	TELEDYNE SPRAGUE ENGINEERING	3,942		
	TELEDYNE TABER	29		
	TELEDYNE TELEMETRY CO	24		
	TELEDYNE THERMATICS	813		
	TELEDYNE WAH CHANG	132		
	TELEDYNE WALTERBORD	625		
	TELEDYNE WISCONSIN MOTOR	331		
	TATAI			
	TOTAL	396,237	0.52	50.08
34.	FORD MOTOR CO	1,147		
	FORD AEROSPACE + COMMUNICATIONS	394,630		
	TOTAL	395,777	0.52	50.60
35.	TODD SHIPYARDS CORP	202 154		
33.	DESIGNERS + PLANNERS, INC	393,154 1,144		
	DESIGNERS - FERNALIS, INC	1,144		
	TOTAL		0.51	51.11
		•		
36.	CONGOLEUM CORP			
	BATH IRON WORKS CORP	377,879		
	TOTAL	377,879	0.49	51.60
		• • • • • • • • • • • • • • • • • • • •		
37.	INTERNATIONAL TELEPHONE + TEL CORP	178,364		
	FEDERAL ELECTRIC CORP	89,552		
	I T T ARTIC SERVICES, INC	11,508		
	1 T T BARTON	1,409		
	I T T BLACKBURN CORP	12		
	I T T CONTINENTAL BAKING CO I T T COURIER TERMINAL SYSTEMS INC	4,612		
	I T T GENERAL CONTROLS, INC	295 943		
	I T T GILFILLAN INC	29,360		
	I T T GRINNELL CORP	20		
	I T T GWALTNEY INC	3,863		
	I T T HAMMEL DAHL CONOFLOW	115		
	I T T HARPER, INC	2,474		
	1 T T HENZE SERVICE	24		
	I T T JENNINGS	675		
	1 T T NORTH ELECTRIC CO	285		
	I T T POMONA ELECTRONICS INC	49		
	I T T TELECOMMUNICATIONS	100		
	I T T THOMPSON INDUSTRIES, INC	245		
	I T T WORLD COMMUNICATIONS, INC	9,672		
	J C C PUMP CO INC	1,375		
	STANDARD TELEPHONES + CABLES, LTD	155		
	TOTAL	335,107	0.44	52.04
				02.01
38.	AMERADA HESS CORP	3,319		
	HESS OIL VIRGIN ISLANDS CORP	328,380		
	TATAI	001 600	0.42	80 47
	TOTAL	331,699	0.43	52.47
39.	BENDIX CORP	288,526		
	BENDIX AUTOLITE CORP	342		
	BENDIX FIELD ENGINEERING CORP	28,760		
	COURTER INC	1,693		
	FRAM CORP	2,639		
	TOLEDO STAMPING & MFG CO	25		
	Warner & Swasey Co	500		
	TOTAL	322,485	0.42	52.89
		,	J. 75	

RANK	COMPANI ES	THOUSANDS OF Dollars	PERCENI OF U.S. Total	CUMULATIVE PERCENT OF U.S. TOTAL
40.	GENERAL TIRE + RUBBER CO	1,458		
	AEROJET GENERAL CORP	316,398		
	HOWE RICHARDSON SCALE CO	21		
	JOHNSTON PUMP CO	16		
	TOTAL			
	TOTAL	317,893	0.41	53.30
41.	GENERAL TELEPHONE + ELECTRNCS CORP	25		
	G T E AUTOMATIC ELECTRIC INC	66		
	G T E INFORMATION SYSTEMS, INC	1,632		
	G T E LABORATORIES, INC	288		
	G T E LENKURT, INC	508		
	G T E PRODUCTS CORP	662		
	G T E SYLVANIA INC General Telephone co of Florida	295,243		
	GENERAL TELEPHONE CO OF SOUTHEAST	672		
	GENERAL TELEPHONE CO OF SOUTHWEST	7 89 1,117		
	HAWAIIAN TELEPHONE CO	8,968		
	TOTAL	309,970	0.40	53.70
		·		_
42.	AVCG CORP	262,138		
	AVCO EVERETT RESEARCH LABORATORY	24,527		
	TOTAL	286 665	0.37	54.07
	45. 405.6 646.05.5		0.07	04.07
43.		102,963		
	ARCO PETROLEUM CO Wright oil co inc	181,951		
	WATCH! OIL CO INC	759		
	TOTAL	285,673	0.37	54.44
44.	HADOOS OSDD			
44,	HARSCO CORP BRODERICK CO	280, 203		
	PATTERSON KELLEY CO	28 25		
	TOTAL	280, 256	0.36	54.80
45.	MOBIL CORP			
	CONTAINER CORP OF AMERICA	76		
	MOBIL OIL CORP	276, 113		
	MOBIL OIL PHILIPPINES, INC	55		
	TOTAL	276,244	0.36	55.16
46.	SAM WHAN CORP	266 240	0.25	
		266, 340	0.35	55.51
47.	GOODYEAR TIRE + RUBBER CO	41,986		
	GOODYEAR AEROSPACE CORP	221,089		
	MOTOR WHEEL CORP	1,081		
	TOTAL	004 450		
	TOTAL	264,156	0.34	55.85
48.	NORTH AMERICAN PHILIPS CORP	612		
	AMPEREX ELECTRONIC CORP	4,099		
	ANCHOR BRUSH CO INC	176		
	CHICAGO MAGNETIC WIRE CO	539		
	EDAX INTERNATIONAL INC	48		
	GENERAL ATRONICS CORP Kulka Electric Corp	4,510		
	MAGNAVOX CO	15		
	MAGNAVOX GOVT + INDUSTRIAL ELEC CO	84,869 158 008		
	NORTH AMERICAN PHILIPS CONTROLS CO	158,098 1,640		
	NORTH AMERICAN PHILIPS LTG CORP	305		

		T. (4) (4)		A.M
RANK	COMPANIES	THOUSANDS OF	PERCENT OF U.S.	CUMULATIVE PERCENT OF
		DOLLARS	TOTAL	PERCENT OF U.S. TOTAL
48.	**=***			
	PHILIPS BUSINESS SYSTEMS INC	110		
	PHILIPS ELECTRONIC INSTRUMENTS INC PHILIPS MEDICAL SYSTEMS INC	392		
	PHILIPS MEDICAL STSTEMS INC PHILIPS TEST & MEASURING INSTRS	4,966		
	SMITH HERMAN H INC	· 32 48		
	THOMPSON HAYWARD CHEMICAL CO	59		
	TOTAL	260,518	0.34	BC 10
	· · · <u>-</u>	200,010	0.34	30.15
49.	COASTAL CORP BELCHER OIL CO	20 550		
	BELCHER GIL CO OF CAPE CANAVERAL	39,559 309		
	BELCHER TERMINALS INC	614		
	COASTAL STATES ENERGY CO	894		
	COASTAL STATES MARKETING INC	204, 929		
	GLENN PETROLEUM CORP	115		
	LO VACA GATHERING CO	4,012		
	TOTAL	250,432	0.33	56.52
		200,432	0.33	30.32
5 0.		240,931		
	HOFFMAN ELECTRONICS INC	157		
	I T E IMPERIAL CORP	3,096		
	TOTAL	244,184	0.32	56.84
5 1.	SUN CO INC	149,318		
	SUN SHIPBUILDING + DRY DOCK CO	80,747		
	TOTAL	230,065	0.30	57.14
52 .	ROYAL DUTCH SHELL GROUP			
	SHELL CHEMICAL INC	111		
	SHELL CO OF THE ISLAND	980		
	SHELL CURACAO N V	110,849		
	SHELL EASTERN PETROLEUM PTE LTD	48, 988		
	SHELL INTERNATIONAL	3,362		
	SHELL NEDERLAND	103		
	SHELL OIL CO	60, 65 6		
	SHELL UK LTD	41		
	TOTAL	225,090	0.29	57.43
E0	AGIP S P A	222 552	0.20	57.72
53.		223,660	0.29	67.72
54 .	TEXACO INC	1,829		
	CALTEX ASIA LTD 1/	902		
	CALTEX NEW ZEALAND, INC	5 <u>1</u>		
	CALTEX OIL PAKISTAN CALTEX OIL PRODUCTS CO	7		
	CALTEX OVERSEAS LTD	85,646 7		
	DEUTSCHE TEXACO VERKAUF GMBH	2,228		
	TEXACO EXPORT INC	24		
	TEXACO INTERNATIONAL TRADER INC	130,072		
	TEXACO UK LTD	357		
	TOTAL	201 120	0.00	86 01
	IOTAL	221,123	0.29	58.01
55.	HERCULES, INC	219,805		
	HAVEG INDUSTRIES INC	497		
	**			
	TOTAL	220,302	0.29	58.30

^{1/} Stock ownership in the Caltex Companies is equally divided between Standard Oil of California and Texaco, Inc.

RANK	COMPANIES	THOUSANDS OF Dollars	PERCENT OF U.S. TOTAL	CUMULATIVE PERCENT OF U.S. TOTAL	
56.	HANIL DEV CO LTD & AL MABANI JV	217,558	0.28	58.58	
57.	STANDARD DIL OF INDIANA AMOCO CHEMICALS CORP AMOCO DIL CO	20 202,109			
	TOTAL	202,129	0.26	58.84	
58.	REYNOLDS (RJ) INDUSTRIES, INC DEL MONTE CORP DEL MONTE SALES CORP GRANNY GOOSE FOODS INC RJR FOODS, INC SEA-LAND SERVICE, INC	30,274 11,029 2,261 220 3,212 155,007			
	TOTAL	202,003	0.26	59.10	
59.	MOTOROLA INC Universal data systems inc	199,199			
	TOTAL	199,291	0.26	59.36	
60.	EMERSON ELECTRIC CO CHANCE A B CO RIDGE TOOL CO ROSEMOUNT INC	184,799 103 19 5,357			
	TOTAL	190,278	0.25	59.61	
61.	MI RYUNG CONSTRUCTION CO LTD	172,125	0.22	59.83	
62.	G K TECHNÖLÖGIES INC AUTOMATION INDUSTRIES INC G & H TECHNÖLÖGY INC SPRAGUE ELECTRIC CO	502 166,013 196 1,620			
	TOTAL	168,331	0.22	60.05	
63 .	JOHNS HOPKINS UNIVERSITY (N)	163,684	0.21	60.26	
64 .	HARRIS CORP	163,052	0.21	60.47	
65 .	SIGNAL COMPANIES INC (THE) AIRESEARCH MFG CO AIRESEARCH MFG CO OF ARIZONA AIRESEARCH MFG CO OF CALIFORNIA JUNHAM BUSH INC GARRETT CORP MACK TRUCKS INC SOUTHLAND OIL CORP	36 601 17,781 15,568 483 117,931 6,125 4,397			
	TOTAL	162,922	0.21	60.68	
66 .	AEROSPACE CORP (N)	160,394	0.21	60.89	

RANK	COMPANI ES	OF Dollars	PERCENT	CUMULATIVE PERCENT OF U.S. TOTAL
6 7.		149,713 994 6,932	 	
	TOTAL	157,639	0.21	61.10
68 .	MASSACHUSETTS INSTITUTE TECHNOLOGY	155,953	0.20	61.30
69 .	SUMMA CORP	153,979	0.20	61.50
70.	SVERDRUP CORP ARO INC SPIRE CORP SVERDRUP & PARCEL & ASSOC INC	144,916 712 6,038		
71.		151,666	0.20	61.70
	GASCO INC HAWAIIAN INDEPENDENT REFINERY INC	6,376 141,147 		
	TOTAL	147,523	0.19	61.89
72 .	GENERAL AGENCIES & SAM WHAN JV	144,306	0.19	62.08
73 .	AMERICAN MOTORS CORP A M GENERAL CORP MERCURY PLASTICS CO TOTAL	108 141,455 617 142,180	0.19	62 . 2 7
74.	CONTROL DATA CORP COMMA CORP KEROTEST MFG CORP SERVICE BUREAU CORP THE	138,988 32 436 25		
	TOTAL	139,481	0.18	62.45
75.	SAUDI MAINTENANCE CO LTD	128,834	0.17	62.62
76 .	PAN AMERICAN WORLD AIRWAYS INC	126,565	0.16	62.78
77.	XEROX CORP FUJI-XEROX CO, LTD GINN + CO KOREA XEROX CO LTD RANK XEROX LTD XEROX DATA SYSTEMS, INC XEROX ELECTRO OPTICAL SYSTEMS INC	58,682 1,301 230 440 1,657 382 58,014		
	TOTAL	120,706	0.16	62.94
78.	GUAM GIL + REFINING CO INC	118,382	0.15	63.09

		THOUSANDS	PERCENT OF U.S. TOTAL	PERCENT OF
RANK	COMPANIES	ÖF DÖLLARS		
79.	CHAMBERLAIN MFG CORP	113,254	0.15	63.24
80.	MITRE (THE) CORP (N)	110,919	0.14	63.38
81.	SUN CHEMICAL CORP	110,874	0.14	63.52
82.	GETTY DIL CO ASSOCIATED DIL CO GETTY REFINING & MARKETING CO	32,397 160 77,699		
	TOTAL	110,256	0.14	63 66
83.	GROVES KIEWIT GRANITE JV	109,040	0.14	63.80
84.	KASLER CONTINENTAL HELLER ETAL JV	103,925	0.14	63.94
85.	THICKOL CORP	103,217	0.13	64.07
86.	EASTMAN KODAK CO EASTMAN KODAK STORES INC KODAK EXPORT, LTD	103,033 26 71		
	TOTAL	103,130	0.13	64.20
87.	SANDERS ASSOCIATES INC	102,227	0.13	64.33
88.	LEAR SIEGLER INC	101,656	0.13	64.46
89.	LORAL CORP CONIC CORP LERMER PACKAGING CORP	94,236 6,013 27		
	TOTAL	100,276	0.13	64.59
90.	FELEC SERVICES INC	99,328	0.13	64.72
91.	FIRST COLONY FARMS INC UNITED STATES LINES CO	97,156		
	TOTAL	97,156	0.13	64 . 85
92.	PRIDE REFINING CO	95,840	0.12	64.97
93.	IMPERIAL CHEMICAL INDUSTRIES LTD I C ! AMERICAS INC IMPERIAL METAL INDUSTRIES LTD	94,785 181		

RANK	COMPANIES	THOUSANDS OF Dollars	OF U.S.	CUMULATIVE PERCENT OF U.S. TOTAL
93.	IMPERIAL CHEMICAL INDUSTRIES LTD			
	TOTAL	94,966	0.12	65.09
94.	CENTEX CORP BATESON J W CO INC	91,497 2,967		
	TOTAL	94,464	0.12	65.21
95.	COMPUTER SCIENCES CORP	92,955	0.12	65.33
96.	MONTEDISON SPA	92,248	0.12	65.45
97.	CITY INVESTING CO Hayes international corp Rheem MFG CO	91,280 416		
	TOTAL	91,696	0.12	65.57
98.	ASHLAND OIL INC ASHLAND CHEMICAL CO ASHLAND PETROLEUM CO EASTERN SEABOARD PETROLEUM CO, INC NIELSONS INC	37,082 1,006 48,010 4,446 18		
	TOTAL	90,562	0.12	65.69
99.	GULF OIL CORP GULF OIL CHEMICALS CO GULF OIL TRADING CO GULF PETROLEUM SA PANAMA GULF RESEARCH + DEVELOPMENT CO INDUSTRIAL ASPHALT INC KOREA OIL CORP	79,687 106 1,763 759 69 368 7,510		
	TOTAL	90,262	0.12	65.81
100.	HEWLETT PACKARD CO DATAMEC CORP	85,523 56		
	TOTAL	85,579	0.11	65.92

